ABSTRACT OF THE DISCLOSURE

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An object of the present invention is to offer an optimization method for power generation cost and optimization system for power generation cost that enable the transmission company to use the alternative fuel stably at the lowest possible burden.

To achieve the object, the optimization system for power generation cost 14 of the fuel information management company 93 calculates the fuel cost, taking the CO_2 emission rights trading into account, in the case of mixing the alternative fuel, such as DME, with the fossil fuel, both supplied by the fuel supply company 91 for achieving the target power generation output in the power generation plant of the transmission company 92, determines the ratio of mixture of the alternative fuel at which the fuel cost is lower than in the case of using the fossil fuel only, forms an operating plan for operating the plant at the ratio of mixture, and sends the plan to the transmission company 92. In addition, the system charges the price, which is the difference between the fuel costs in the case of using the fossil fuel only and mixing the alternative fuel with the fossil fuel, multiplied by a pre-specified coefficient, as a service charge for the merit the transmission company 92 has enjoyed.

The transmission company 92 can use the alternative

fuel at the lowest possible burden.